

**Amendments to and listing of the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of allowing entities to cooperate for implementing one or more processes, the method comprising:
  - (a) storing and retrieving information in the form of tuples;
  - (b) using the tuples to represent objects involved in one or more processes, wherein each object is produced by an entity; and
  - (c) connecting the tuples with keys to represent sequential events of the one or more processes.
2. (Original) The method of claim 1 further comprising:
  - (d) associating each object with one or more semantic terms; and
  - (e) allocating one tuple named with the semantic term for every association, the tuple containing the information provided by the object corresponding to the meaning of the semantic term.
3. (Original) The method of claim 2 further comprising:
  - (f) indicating one or more of the semantic terms in order to represent a goal of the one or more processes.
4. (Original) The method of claim 2 further comprising:
  - (f) generating chains of events which terminate at the tuples corresponding to each semantic term.
5. (Original) The method of claim 2 further comprising:
  - (f) generating semantic categories by aggregating the semantic terms.
6. (Original) The method of claim 1 further comprising:

(d) representing the conditions under which the entity can produce one or more of the objects by using tuple templates.

7. (Currently Amended) An apparatus for allowing entities to cooperate for implementing one or more processes, the apparatus comprising:

(a) means for storing and retrieving information in the form of tuples;

(b) means for represent objects involved in one or more processes by using the tuples, wherein each object is produced by an entity; and

(c) means for connecting the tuples with keys to represent sequential events of the one or more processes.

8. (Original) The apparatus of claim 7 further comprising:

(d) means for associating each object with one or more semantic terms; and

(e) means for allocating one tuple named with the semantic term for every association, the tuple containing the information provided by the object corresponding to the meaning of the semantic term.

9. (Original) The apparatus of claim 8 further comprising:

(f) means for indicating one or more of the semantic terms in order to represent a goal of the one or more processes.

10. (Original) The apparatus of claim 8 further comprising:

(f) means for generating chains of events which terminate at the tuples corresponding to each semantic term.

11. (Original) The apparatus of claim 8 further comprising:

(f) means for generating semantic categories by aggregating the semantic terms.

12. (Original) The apparatus of claim 7 further comprising:

(d) means for representing the conditions under which the entity can produce one or more of the objects by using tuple templates.

13. (Currently Amended) An article of manufacture for allowing entities to cooperate for implementing one or more processes, the article of manufacture comprising a computer-readable medium holding computer-executable instructions for performing a method comprising:

- (a) storing and retrieving information in the form of tuples;
- (b) using the tuples to represent objects involved in one or more processes, wherein each object is produced by an entity; and
- (c) connecting the tuples with keys to represent sequential events of the one or more processes.

14. (Original) The article of manufacture of claim 13 wherein the computer-executable instructions perform a method further comprising:

- (d) associating each object with one or more semantic terms; and
- (e) allocating one tuple named with the semantic term for every association, the tuple containing the information provided by the object corresponding to the meaning of the semantic term.

15. (Original) The article of manufacture of claim 14 wherein the computer-executable instructions perform a method further comprising:

- (f) indicating one or more of the semantic terms in order to represent a goal of the one or more processes.

16. (Original) The article of manufacture of claim 14 wherein the computer-executable instructions perform a method further comprising:

- (f) generating chains of events which terminate at the tuples corresponding to each semantic term.

17. (Original) The article of manufacture of claim 14 wherein the computer-executable instructions perform a method further comprising:

(f) generating semantic categories by aggregating the semantic terms.

18. (Original) The method of claim 13 wherein the computer-executable instructions perform a method further comprising:

(d) representing the conditions under which the entity can produce one or more of the objects by using tuple templates.